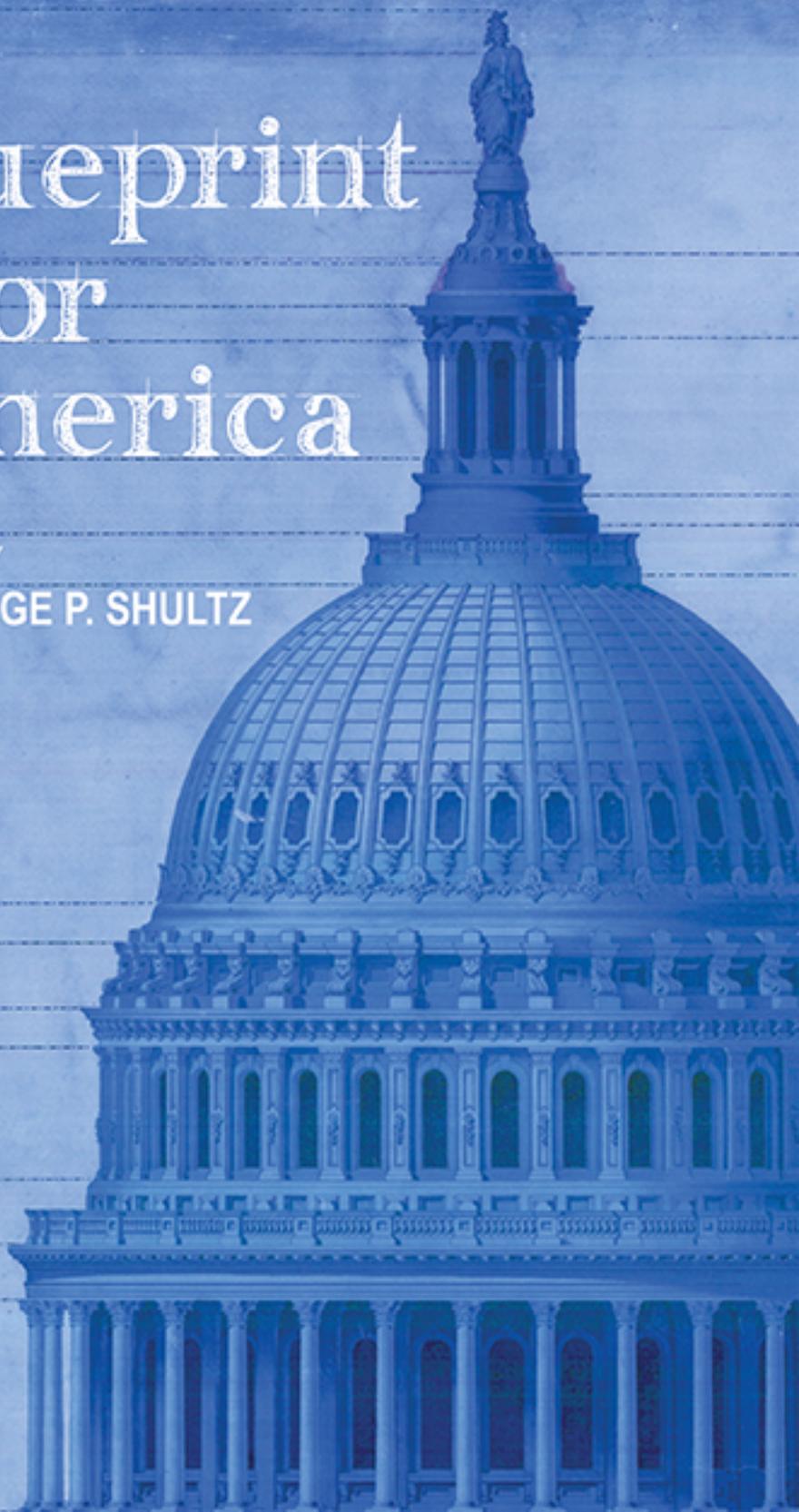


Blueprint for America

EDITED BY

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REFORMING REGULATION

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Government regulation, at the federal, state, and local levels, is pervasive. Last year alone, almost eighty thousand pages of rules, proposed rules, and notices were published in the federal register. Most regulations impose costs, and studies indicate they cause a cumulative large drag on the economy. Those costs are colloquially said to be “on business,” but in reality businesses shift them to consumers with higher prices, workers with lower wages, or investors with lower returns.

Regulations can also stifle innovation and competition, and therefore economic growth. In fact, most economic regulation keeps prices up and competition down, e.g., taxi regulation. Regulation can also achieve important social benefits, such as reducing pollution. Most of our laws, and Supreme Court rulings on federal agencies’ implementation of laws, wisely demand a sensible balancing of these benefits with costs and risks. While estimates of regulatory costs and benefits are less precise than those for direct spending and taxation, studies from think tanks and government agencies estimate the annual cost of regulation at well over a trillion dollars per year. In 2014, the Office of Management and Budget reported that the cost of just the small fraction of new rules enacted in the prior decade, with estimated annual costs over \$100 million, was \$100 billion a year. But that includes only a handful of the more than thirty thousand regulations the

Office of Management and Budget (OMB) enumerates, and none of the costly, long-standing major regulations. And these cost estimates include only the direct costs of complying with regulation, not the potential lost innovation (e.g., new drugs that regulation inhibits) or the effects of reduced competition and delay. Some businesses operate in a straitjacket of rules and regulation; for example, a single refinery may confront twenty thousand different potential regulatory violations per day.

To be sure, there may be enough economic, health, safety, environmental, or other benefits to justify many regulations, and some sectors of the economy need regulation for various reasons. For most of the previous century, economic regulation of traditional natural monopolies—utilities in telecommunications, electricity, and transportation, for example—dominated the regulatory terrain. With large network fixed costs, demand—especially local demand—was insufficient to support more than one or a very few firms. To try to gain some of the benefits of competition, and to decrease monopoly or oligopoly pricing, these firms were regulated by utility commissions that set negotiated prices deemed sufficient to secure a reasonable return for the firm. Insufficient incentive was left to innovate, as firms had little upside. A couple of decades ago, productivity pricing requiring the firm to lower price(s) (net of inflation) by a modest productivity target created greater incentives to lower cost, especially since the firm, at least for some time, had upside return opportunities if it could beat the productivity target.

However, as Nobel Laureate George Stigler suggested, the regulators are often captured by the very industry they are regulating. The regulators depend on the regulated firms for information about costs and other factors. These firms have strong incentives to fashion information that benefits them and, perhaps more importantly, to encourage rules that protect them from competition, especially competition from new and innovative firms. Complex and time-consuming regulation itself limits competition. Dealing

with regulation is a large fixed cost that has to be spread over a large base of customers, which a new entrant does not have. So obtaining all the necessary regulatory approvals can keep newcomers out.

Captured regulators may fail disastrously. A blatant example was that of the banking regulators, including the New York Federal Reserve, who at best were asleep at the wheel leading up to the financial crisis of 2008–09. In the middle of the last decade, in an attempt to ward off European Union regulation of American investment banks' European operations, the Securities and Exchange Commission took on regulating the investment banks. How did it do? It allowed them to increase their already-high leverage and measure their own capital!

One type of regulation that has thus far seemed to work well is safety regulation of US nuclear power plants. A key has been the safety inspection and review by other power plant operators. Recognizing that a problem in one plant by one operator is likely to become a potentially substantive, but certainly public-relations, problem for all, the companies have agreed among themselves to submit to such an inspection by their peers. This promotes the potential spread of best practices. An analogous situation has occurred in the aftermath of the BP Gulf oil spill. A consortium of other Gulf oil operators, led by Exxon, set up an independent, pre-positioned response team and equipment for coordinated rapid response to deal with any future spill. To be sure, this type of “all for one” team approach by the companies themselves only works when the incentives for joint action are strong enough to overcome the companies' individual incentives and protection of competitive proprietary information.

Antitrust regulation is often motivated by fighting monopolies. But potential competition can keep prices down even in an industry with a small number of producers. In some instances, the regulations did more harm than good. Joseph Schumpeter's “creative destruction” idea pointed out that monopoly and monopoly prof-

its eventually beget new technology, competitors, platforms, and methods that undermine the entrenched monopoly and give way to a new one. This serial monopoly is good for innovation and less harmful to consumers than traditionally argued, at least if the new firms come along to provide new options at a rapid enough pace.

These ideas are most important in technology, one of our most innovative sectors. The Federal Communication Commission's attempt to micromanage Internet access is the modern equivalent of the outmoded utility commissions, which ended up eventually stifling and cartelizing their industries.

What was originally called new social regulation—of the environment, for instance, or health and safety—has become ubiquitous in the last few decades. A new set of acronyms—EPA, OSHA, etc.—entered citizens' everyday vocabulary. Some of these regulations made substantial progress on some fronts. But these regulations usually used blunt instruments of command and control, specifying not only goals and targets, but also how these were to be achieved—adding this scrubber, blending that additive, adopting a specific technology. So they came with a large, at least partly unnecessary, cost.

For example, what is certainly on the Top Ten List of the most ridiculous regulations in history occurred when President George W. Bush decided to emphasize cellulosic ethanol in his Advanced Energy Initiative, saying, "Our goal is to make this new kind of ethanol practical and competitive within six years." Cellulosic ethanol was thought to have environmental advantages over corn ethanol. So the Environmental Protection Agency (EPA) required fixed and increasing amounts of it to be blended into motor fuel, toward a target of 1.75 billion gallons.

Energy firms were fined for not blending enough into their fuel. The only problem was that there wasn't much, if any, cellulosic ethanol available. The first attempt to build a plant to meet the EPA's mandates received over \$80 million in government subsidies, but closed without ever producing any ethanol. In 2011,

the National Academy of Sciences declared it was not possible to produce cellulosic ethanol on a commercial scale with existing technology. A lawsuit resulted in the federal court throwing out the regulation, stating that the “EPA’s methodology for making its cellulosic ethanol projection did not take neutral aim at accuracy; it was an unreasonable exercise of agency discretion.” The EPA lowered its target by 99 percent. The central failure here was its command that gasoline producers use a fixed quantity of an unproven new fuel, with no regard to price, cost, or feasibility, and no mechanism for adapting to experience.

At the other extreme is the successful Montreal Protocol, a complex international treaty, anchored in sound science, phasing out chemicals depleting atmospheric ozone. A variety of measures have the ozone hole now shrinking. Environmental protection can—and must, in the future—be designed to coexist with strong economic growth.

More recently, laws and regulations have made increasing use of market-based solutions for environmental problems. The two primary mechanisms are tradable permits and Pigovian taxes or subsidies designed to “internalize” social costs (or benefits), such as pollution and congestion, that are generated by economic activity. An important successful example was the emissions trading for sulfur dioxide in the Clean Air Act amendments of 1990. Congestion taxes and time-varying tolls are familiar strategies that are helping to control traffic in many cities around the world, e.g., central London.

Nobel Laureate Ronald Coase taught us that there are strong private incentives to internalize such costs, for example by merger or side payments, when the number of people or firms involved is small. But when the numbers become large, this mechanism breaks down and congestion tolls or emissions charges can, in principle, be designed to improve on the market outcome. However, even market-based solutions can be poorly designed or implemented. Europe’s recent carbon-trading program has been

highly criticized, for example. If the emissions reductions are too large or too small, getting to the wrong level efficiently may be scant recompense. Or using a market mechanism as a bandage on top of a maze of command and control regulations may convey the impression of efficiency in what is a regulatory cost overrun.

Even scaling down the estimates of costs cited above—and taking a generous interpretation of benefits—leaves an opportunity for huge economic gains from major improvement in the nation's regulatory apparatus. Far more rigorous implementation of unbiased cost-benefit analyses is needed. Currently, most of the analysis of benefits and costs is conducted by the relevant regulatory agency proposing, designing, and overseeing the regulation—when that analysis is done at all. While that agency may have relevant expertise, it may also be captured by the firms it regulates, or its objectivity may be challenged, given its mission and/or political pressures.

To reduce this tendency, the Office of Information and Regulatory Affairs (OIRA) of the OMB has some oversight responsibility for cost-benefit analysis and is supposed, especially, to opine on rules likely to cost in excess of \$100 million. While a useful check, it has not proved adequate. In fact, immensely costly regulations have been approved, especially EPA rules, only to be resoundingly overruled by the Supreme Court for failing even to consider costs.

Importantly, there is little *ex post* evaluation of cost estimates, as opposed to *ex ante* prediction. Either OIRA must be substantially beefed up in expertise and independent authority, or an *independent* evaluation body must be authorized to opine between the agencies and the adoption of the rules. In many instances, such review might find more effective and efficient ways to achieve regulatory objectives at less cost to the private sector and, in any event, could expose ludicrously low cost estimates at an early stage.

Greater use of market-based solutions is one promising avenue. A complementary useful tool would be to build conditional

“sunsets” into rules at interim periods if they failed to pass *ex post* independent cost-benefit tests based on interim data, thereby forcing corrective action. So long as such a process did not relax *ex ante* scrutiny, it would create incentives for regulatory agencies to design better rules in the first place. And the nature of costs and benefits considered must expand beyond direct costs to the effects of regulation on competition and innovation.

When I was chair of the Council of Economic Advisers, we implemented our own version of this process with the Clean Air Act Amendments of 1990. Concerned that the costs were going to be immense, we got the president to announce that he would veto a bill if costs exceeded a set amount, as estimated by the CEA, not the EPA (as its estimates were controversial). We worked closely with the EPA leadership to implement emissions trading for sulfur dioxide, which *ex post* independent studies estimated reduced compliance costs by 55 percent. Less well known is that I had a signed letter from the EPA administrator agreeing to many other cost-reducing features. These included reasonable implementation of the New Source Review requirement, so firms wouldn't have to do massive upgrades to repair a leaky pipe, and intertemporal trading and banking of the emissions permits. In fact, a futures market in the permits opened before the spot market. While the costs were reduced, *ex post* analysis demonstrated the environmental damage, and the benefits of emission reduction, had been substantially overestimated.

Presidents and Congresses often seek to get around such budgetary or tax constraints that exist by substituting regulation and mandates on the private sector. For example, the regulation and mandates on banks' loans and investments to support low-income housing—instead of raising revenues and providing grants or subsidies directly to borrowers on budget, where costs are harder to hide or ignore and are more likely to be limited—was one of the contributors to the financial crisis and Great Recession.

An overall regulatory budget cap and a requirement stating that

an old regulation of comparable cost must be removed for every new regulation imposed—a successful recent reform in Canada—are additional tools to make sure we have effective regulation that balances benefits and costs. Reforms such as these, sensibly implemented, valuable in their own right, can be an important part of a strategy to strengthen growth and opportunity.